

Title (en)

ELECTRODE ASSEMBLY, SECONDARY BATTERY, BATTERY MODULE, BATTERY PACK, AND ELECTRIC DEVICE

Title (de)

ELEKTRODENANORDNUNG, SEKUNDÄRBATTERIE, BATTERIEMODUL, BATTERIEPACK UND ELEKTRISCHE VORRICHTUNG

Title (fr)

ENSEMBLE D'ÉLECTRODES, BATTERIE SECONDAIRE, MODULE DE BATTERIE, BLOC-BATTERIE ET DISPOSITIF ÉLECTRIQUE

Publication

**EP 4195307 A1 20230614 (EN)**

Application

**EP 21927051 A 20211013**

Priority

CN 2021123647 W 20211013

Abstract (en)

The present application discloses an electrode assembly, secondary battery, battery module, battery pack and electrical device. The electrode assembly comprises a positive electrode plate, a negative electrode plate and a separator disposed between the positive electrode plate and the negative electrode plate, the positive electrode plate satisfies  $CAP1 = CAP2$ , in which  $CAP1$  represents capacity of the first positive electrode film layer in Ah,  $CAP2$  represents capacity of the second positive electrode film layer in Ah, and the electrode assembly satisfies  $|R_{<sub>4</sub>}/R_{<sub>3</sub>} - R_{<sub>2</sub>}/R_{<sub>1</sub>}| > 0$ , in which  $R_{<sub>1</sub>}$  represents resistance of the first positive electrode film layer in Q,  $R_{<sub>2</sub>}$  represents resistance of the second positive electrode film layer in Q,  $R_{<sub>3</sub>}$  represents resistance of the first negative electrode film layer in mQ and  $R_{<sub>4</sub>}$  represents resistance of the second negative film layer in mQ. The present applicant may extend the life cycle of the secondary battery.

IPC 8 full level

**H01M 4/13** (2010.01)

CPC (source: EP KR US)

**H01M 4/13** (2013.01 - EP); **H01M 10/04** (2013.01 - EP); **H01M 10/0413** (2013.01 - EP); **H01M 10/0431** (2013.01 - EP); **H01M 10/0463** (2013.01 - EP); **H01M 10/052** (2013.01 - EP); **H01M 10/0525** (2013.01 - EP); **H01M 10/058** (2013.01 - EP KR); **H01M 10/0585** (2013.01 - EP US); **H01M 10/0587** (2013.01 - EP); **H01M 10/42** (2013.01 - EP KR); **H01M 10/4235** (2013.01 - EP); **H01M 50/105** (2021.01 - EP); **H01M 50/119** (2021.01 - EP); **H01M 50/148** (2021.01 - US); **H01M 50/204** (2021.01 - US); **H01M 50/209** (2021.01 - EP); **H01M 50/531** (2021.01 - EP); **H01M 4/134** (2013.01 - US); **H01M 50/102** (2021.01 - US); **H01M 50/103** (2021.01 - EP KR); **H01M 50/15** (2021.01 - EP KR); **H01M 2004/021** (2013.01 - EP KR); **H01M 2004/027** (2013.01 - EP); **H01M 2004/028** (2013.01 - EP); **H01M 2010/4292** (2013.01 - EP KR); **H01M 2220/20** (2013.01 - EP KR US); **H01M 2220/30** (2013.01 - US); **Y02E 60/10** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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KH MA MD TN

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DOCDB simple family (application)

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